FIG. 1

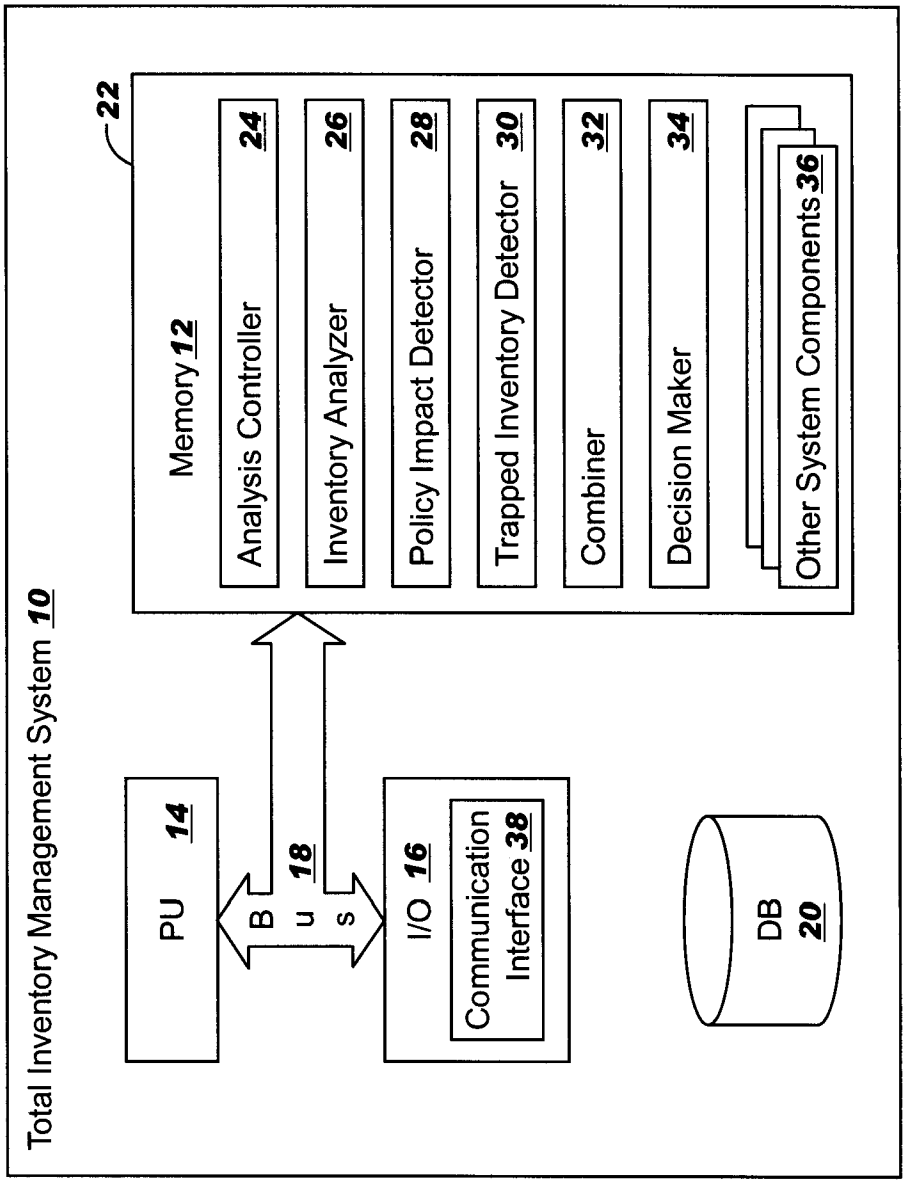
Total Inventory Management System 10
22
Memory 12
Analysis Controller 24
Inventory Analyzer 26
Policy Impact Detector 28
Trapped Inventory Detector 30
Combiner 32
Decision Maker 34
Other System Components 36
PU 14
B
u 18
s
I/O 16
Communication Interface 38
DB 20

FIG. 2

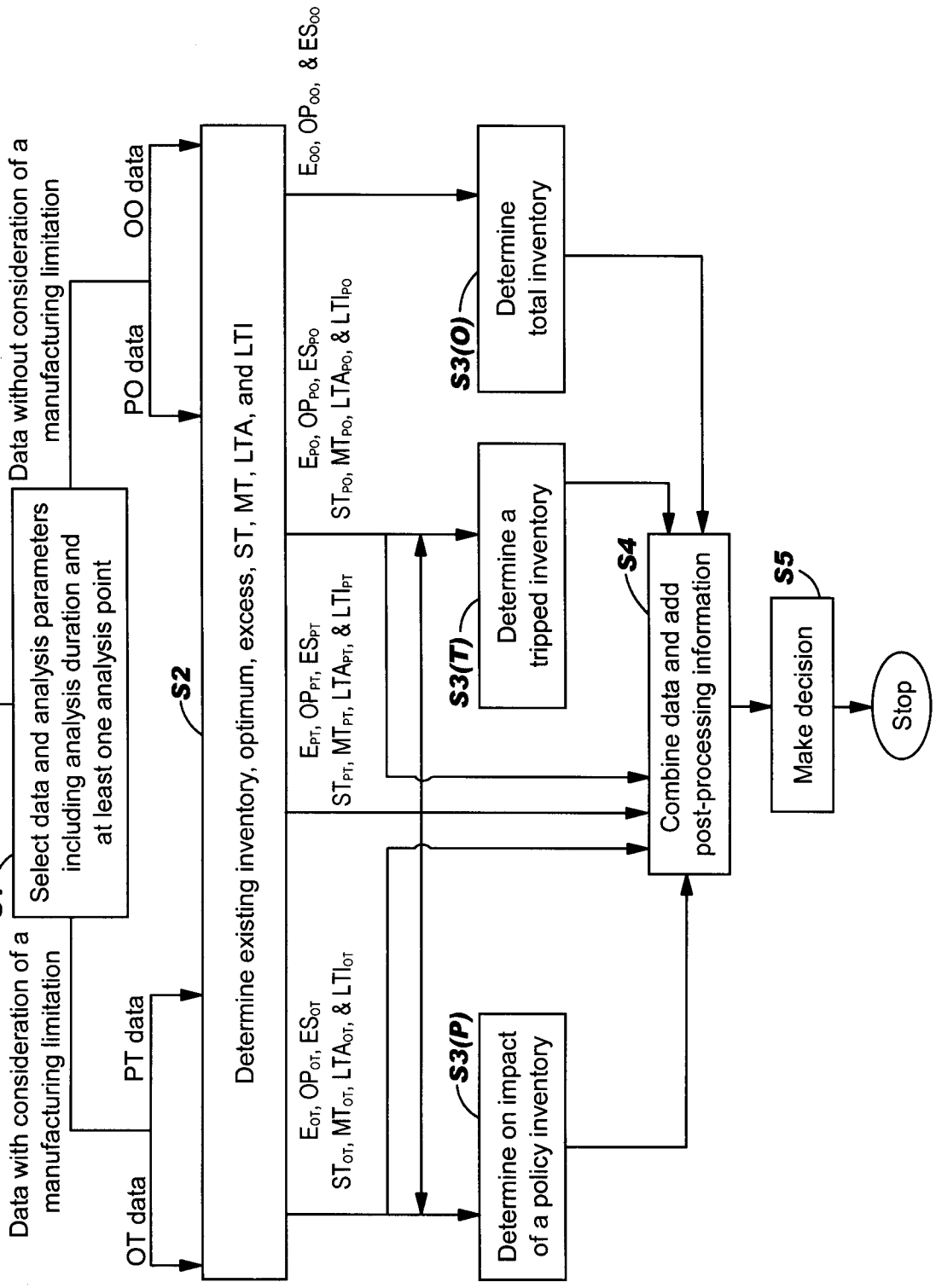
Start
S1
Select data and analysis parameters including analysis duration and at least one analysis point
Data without consideration of a manufacturing limitation
Data with consideration of a manufacturing limitation
PT data
OT data
OO data
PO data
S2
Determine existing inventory, optimum, excess, ST, MT, LTA, and LTI
E_{OT}, OP_{OT}, ES_{OT}
ST_{OT}, MT_{OT}, LTA_{OT}, & LTI_{OT}
E_{PT}, OP_{PT}, ES_{PT}
ST_{PT}, MT_{PT}, LTA_{PT}, & LTI_{PT}
E_{PO}, OP_{PO}, ES_{PO}
ST_{PO}, MT_{PO}, LTA_{PO}, & LTI_{PO}
E_{OO}, OP_{OO}, & ES_{OO}
S3(P)
Determine on impact of a policy inventory
S3(T)
Determine a tripped inventory
S3(O)
Determine total inventory
S4
Combine data and add post-processing information
S5
Make decision
Stop

FIG. 3

PN	Site	Date	Record Type	Quantity/Pieces
0000076P5519	09BD	20030725	Beginning Inventory	41,903
0000076P5519	09BD	20031030	Demand	10,000
0000076P5519	09BD	20040214	Demand	10,000
0000076P5519	09BD	20040731	Demand	10,000

FIG. 4

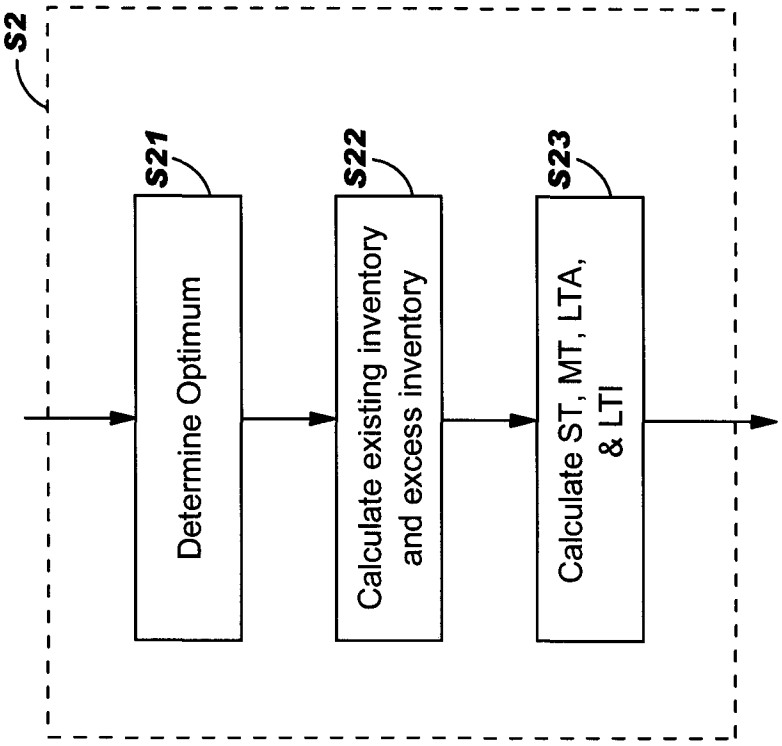
S2
S21
Determine Optimum
S22
Calculate existing inventory and excess inventory
S23
Calculate ST, MT, LTA, & LTI

FIG.
5

PN	Site	Date	Optimum
0000076P5519	09BD	20030725	0
0000076P5519	09BD	20030731	0
0000076P5519	09BD	20030831	0
0000076P5519	09BD	20030930	0
0000076P5519	09BD	20031031	0
0000076P5519	09BD	20031130	0
0000076P5519	09BD	20031231	0
0000076P5519	09BD	20040131	0
0000076P5519	09BD	20040229	0
0000076P5519	09BD	20040331	0
0000076P5519	09BD	20040430	0
0000076P5519	09BD	20040531	0
0000076P5519	09BD	20040630	0
0000076P5519	09BD	20040731	10,000

FIG.
6

PN	Site	Bucket Date	Existing	Optimum	Excess
0000076P5519	09BD	20030725	41,903	0	41,903
0000076P5519	09BD	20030731	41,903	0	41,903
0000076P5519	09BD	20030831	41,903	0	41,903
0000076P5519	09BD	20030930	41,903	0	41,903
0000076P5519	09BD	20031031	31,903	0	31,903
0000076P5519	09BD	20031130	31,903	0	31,903
0000076P5519	09BD	20031231	31,903	0	31,903
0000076P5519	09BD	20040131	31,903	0	31,903
0000076P5519	09BD	20040229	21,903	0	21,903
0000076P5519	09BD	20040331	21,903	0	21,903
0000076P5519	09BD	20040430	21,903	0	21,903
0000076P5519	09BD	20040531	21,903	0	21,903
0000076P5519	09BD	20040630	21,903	0	21,903
0000076P5519	09BD	20040731	21,903	10,000	11,903

FIG. 7

PN	Site	Date	Category	Existing	Optimum	Excess
0000076P5519	09BD	20030731	Base	41,903	0	41,903
0000076P5519	09BD	20031031	ST	31,903	0	31,903
0000076P5519	09BD	20040131	MT	31,903	0	31,903
0000076P5519	09BD	20040731	LT	21,903	10,000	11,903

FIG.
8

PN	Site	Bucket Date	Existing	Optimum	Excess
0000076P5519	09BD	20030725	41,903	0	41,903
0000076P5519	09BD	20030731	41,903	0	41,903
0000076P5519	09BD	20030831	41,903	0	41,903
0000076P5519	09BD	20030930	41,903	0	41,903
0000076P5519	09BD	20031031	31,903	0	31,903
0000076P5519	09BD	20031130	31,903	0	31,903
0000076P5519	09BD	20031231	31,903	0	31,903
0000076P5519	09BD	20040131	31,903	10,000	21,903
0000076P5519	09BD	20040229	21,903	0	21,903
0000076P5519	09BD	20040331	21,903	0	21,903
0000076P5519	09BD	20040430	21,903	0	21,903
0000076P5519	09BD	20040531	21,903	0	21,903
0000076P5519	09BD	20040630	21,903	0	21,903
0000076P5519	09BD	20040731	21,903	10,000	11,903

FIG. 9

PN	Site	Date	Category	Existing	Optimum	Excess
0000076P5519	09BD	20030731	Base	41,903	0	41,903
0000076P5519	09BD	20031031	ST	31,903	0	31,903
0000076P5519	09BD	20040131	MT	31,903	10,000	21,903
0000076P5519	09BD	20040731	LT	21,903	10,000	11,903

FIG. 10

PN	Site	Bucket Date	Existing	Optimum	Excess
0000076P5519	09BD	20030725	41,903	0	41,903
0000076P5519	09BD	20030731	41,903	0	41,903
0000076P5519	09BD	20030831	41,903	10,000	31,903
0000076P5519	09BD	20030930	31,903	0	31,903
0000076P5519	09BD	20031031	31,903	10,000	21,903
0000076P5519	09BD	20031130	21,903	0	21,903
0000076P5519	09BD	20031231	21,903	0	21,903
0000076P5519	09BD	20040131	21,903	0	21,903
0000076P5519	09BD	20040229	21,903	0	21,903
0000076P5519	09BD	20040331	21,903	0	21,903
0000076P5519	09BD	20040430	21,903	0	21,903
0000076P5519	09BD	20040531	21,903	0	21,903
0000076P5519	09BD	20040630	21,903	0	21,903
0000076P5519	09BD	20040731	21,903	10,000	11,903

FIG. 11

PN	Site	Date	Category	Existing	Optimum	Excess
0000076P5519	09BD	20030731	Base	41,903	0	41,903
0000076P5519	09BD	20031031	ST	31,903	10,000	21,903
0000076P5519	09BD	20040131	MT	21,903	0	21,903
0000076P5519	09BD	20040731	LT	21,903	10,000	11,903

FIG. 12

PN	Site	Bucket Date	Existing	Optimum	Excess
0000076P5519	09BD	20030725	41,903	0	41,903
0000076P5519	09BD	20030731	41,903	0	41,903
0000076P5519	09BD	20030831	41,903	10,000	31,903
0000076P5519	09BD	20030930	31,903	0	31,903
0000076P5519	09BD	20031031	31,903	10,000	21,903
0000076P5519	09BD	20031130	21,903	0	21,903
0000076P5519	09BD	20031231	21,903	0	21,903
0000076P5519	09BD	20040131	21,903	0	21,903
0000076P5519	09BD	20040229	21,903	0	21,903
0000076P5519	09BD	20040331	21,903	0	21,903
0000076P5519	09BD	20040430	21,903	0	21,903
0000076P5519	09BD	20040531	21,903	0	21,903
0000076P5519	09BD	20040630	21,903	0	21,903
0000076P5519	09BD	20040731	21,903	10,000	11,903

FIG. 13

Data / Inventory Consumption	OT	PT	PO
ST	10,000	10,000	20,000
MT	0	10,000	0
LTA	20,000	10,000	10,000
LTI	11,903	11,903	11,903